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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,884	06/25/2001	Ari Tourunen	324-010379-US(PAR)	1180

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PERMAN & GREEN
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FAIRFIELD, CT 06824

EXAMINER

MEHRA, INDER P

ART UNIT PAPER NUMBER

2617

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/888,884

Applicant(s)

TOURUNEN ET AL.

Examiner

Inder P. Mehra

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/2/06.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,8,11 and 16 is/are rejected.
- 7) ☒ Claim(s) 2-7,9,10 and 12-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to amendment dated: 6/02/06. Claims 1-16 are pending. Based on this amendment , claims 1-2, 8, 11, and 16 are amended.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 6/25/01 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1, 8, 11 rejected under 35 U.S.C. 103(a) as being unpatentable over **Forslow** (US Patent No. 6,608,832), hereinafter, Forslow, in view of **Titmuss** (US Patent No. 6,522,883), further in view of **Yang** (US Patent Application No. 2004/0095939).

For claims 1, 8 11 and 16, Forslow discloses “a method of allocating data transmission resources (refer to “a base station controller (BSC) 34 which manages the allocation and deallocation of radio resources”, fig. 2, refer to col. 2 lines 50-55), in a packet-switched telecommunications system (51 in fig. 2) including a terminal 12 and a fixed network 35 (PSTN , refer to col. 2 lines 18-20 and lines 60-63), to which an operational entity defined for defining resources for a radio bearer (refer to “Mobile communication resources for the selected bearer and corresponding quality of service parameters may be reserved in advance for each application flow (the resource reservation approach), refer to col. 5 line 65-col. 6 line 15) , the method comprising steps in order :

- defining a compression method of header fields in data packets used on the radio bearer (Forslow discloses, “The subnetwork dependence convergence protocol (SNDCP) provides segmentation and compression of headers and

data between the mobile station and the SGSN in the GPRS. refer to col. 12 lines 28-34), and

- **defining the radio bearer resources for the terminal on the basis of an application used by the terminal said radio bearer such manner (Forslow discloses, “the selection of a particular type of bearer and mapping of quality of service parameters, refer to col. 12 lines 35-37, further, discloses, “Mobile communication resources for the selected bearer and corresponding quality of service parameters may be reserved (defined) --- for each application flow (the resource reservation approach, refer to col. 6 lines 7-15), that said resources also comprise the capacity required by the selected compression method of header fields in data packets (Refer to “a Base Station System GPRS Protocol (BSSGP) is a flow control protocol, which allows the base station system to start and stop PDUs sent by the SGSN. This ensures that the BSS is not flooded by packets in case the radio link capacity is reduced”, refer to col. 4 lines 34-39).**

Forslow does not disclose explicitly the following limitation, which are disclosed by Titmuss and Yang, as follows:

- “that said resources also comprise the capacity required by the selected compression method of header fields in data packets”, (Titmus discloses **“technical capacities collectively available from the plurality of resources with which it is associated”**, refer to col. 20 lines 35-40).
- defining a compression method of header fields (Yang discloses, **“a protocol is defined to compress the RTP/UDP/IP headers and a reduction to between 2 to 5 bytes can be achieved”**, refer to paragraph 0018. This results in saving bandwidth or capacity which is more than the required bandwidth)

It would have been obvious to the person of ordinary skill in the art at the time of the invention to have resources comprising the capacity required by the selected compression method of header fields in data packets, as taught by Titmuss; further, defining a compression method of header fields, as taught by Yang. The motivation to do so being that it provides optimization of transmission resources and reduction of bytes..

Allowable Subject Matter

5. Claims 2-7, 9-10, and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1-16 have been considered, but they are not persuasive.

a. Applicant argues "Forslow does disclose or suggest defining a compression method of header fields data packets used on the radio bearer as recited claim 1. Applicant claims defining a compression method and then defining the radio bearer resources. This is not taught by Forslow. The Examiner makes the statement that in Forslow, the header of each information packet in an application flow may specify a generally recognized class of service, which when read, determines whether a circuit-switched bearer a packet-switched bearer carries that packet, referring Col. 6, lines 10-15. However, neither this statement by the Examiner, nor referred section Forslow, discloses "defining" compression method of header fields in data packets used on the radio bearer.

In response, examiner states that **Yang discloses "Yang discloses, "a protocol is defined to compress the RTP/UDP/IP headers and a reduction to**

between 2 to 5 bytes can be achieved”, refer to paragraph 0018. This results in saving bandwidth or capacity which is more than the required bandwidth.

b. Applicant argues “The passage referred to by the Examiner does not disclose or suggest header field compression methods. Rather, this section only states that a header field may specify recognized class of service.” A uclass of service” is not a “compression method of header field” as claimed by Applicant. In Forslow, header, when read, defines whether circuit-switched bearer a packet-switched bearer carries that packet. (the differential services approach) This is not the same as “defining” a “compression method” of “header fields”. The only section of Forslow that relates to the compression of header fields in Col. 12 lines 29-34. This section discusses how the GPRS modem routes, an IP packet based on its header information. However, the radio bearer is defined first- bearer selection and then the header compression method in the subnetwork dependence convergence protocol. (SNDTCP). (Co1. 12, lines 11-22).

In response, examiner states that Forslow discloses “segmentation and compression headers, refer to col. 12 lines 30-32. Further, examiner states that Forslow discloses in continuation, “selection of particular type of bearer and mapping of quality of service parameters may be performed”, refer to col. 12 lines

36-38. Examiner, further states that Yang discloses, “a protocol is defined to compress the RTP/UDP/IP headers and a reduction to between 2 to 5 bytes can be achieved”, refer to paragraph 0018. This results in saving bandwidth or capacity which is more than the required bandwidth”.

It is logical to compress header first in order to save bytes and then evaluate/define radio bearer resources which comprise the capacity required by the defined compression method of header field.

c. Applicant argues, Claim 1 recites defining the radio bearer resources for the terminal where the resources comprise the capacity" required by the “defined” compression method of header fields. This is not disclosed by Forslow. In Forslow, the GGSN selects the packet-switched or circuit-switched bearer. As will be generally understood, in a packet-switched bearer, packets are individually routed between nodes data links, which could also be shared by other nodes. In circuit-switching, a dedicated connection is set up between two nodes for their exclusive use. In Forslow, after selection of the packet-switched or circuit-switched bearer, the GGSN can select coding or compression rates. This is different from what is claimed by Applicant's where first the “compression

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method" header fields is defined, and then the "radio bearer resources" are defined.

This is not disclosed suggested by Forslow.

In response, examiner discloses, “ **Titmus discloses “technical capacities collectively available from the plurality of resources with which it is associated”**, refer to col. 20 lines 35-40.

AS explained earlier, examiner, further states that Forslow discloses “segmentation and compression headers, refer to col. 12 lines 30-32. Further, examiner states that Forslow discloses in continuation, “selection of particular type of bearer and mapping of quality of service parameters may be performed”, refer to col. 12 lines 36-38. Examiner, further states that **Yang discloses, “a protocol is defined to compress the RTP/UDP/IP headers and a reduction to between 2 to 5 bytes can be achieved”**, refer to paragraph 0018. This results in saving **bandwidth or capacity which is more than the required bandwidth”**.

It is logical to compress header first in order to save bytes and then evaluate/define radio bearer resources which comprise the capacity required by the defined compression method of header field.

In light of above explanation, arguments by applicant are not persuasive.


Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P. Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Inder Pal Mehra 6/26/06
Inder P Mehra
Examiner
Art Unit 2617


JOHN PEZZLO
PRIMARY EXAMINER